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IBM CORPORATION 3039 CORNWALLIS RD. DEPT. T81 / B503, PO BOX 12195 RESEARCH TRIANGLE PARK, NC 27709			EXAMINER FLEISCHER, MARK A	
			ART UNIT 3624	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/628,029	Applicant(s) NONAKA, TAKAAKI	
	Examiner MARK A. FLEISCHER	Art Unit 3624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3 – 8 and 10 – 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3 – 8 and 10 – 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 April 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 2002-218655.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. This non-final action is in reply to the amendments filed on 17 August 2009.
2. Claim 2 has been cancelled and claim 9 has previously been canceled.
3. Claims 1, 3, 5, 7, 8, 12, 14 and 15 have been amended.
4. Claims 1, 3 – 8 and 10 – 15 are currently pending and have been examined.

Continued Examination Under 37 CFR 1.114

5. A request for continued examination under 37 CFR §1.114, including the fee set forth in 37 CFR §1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR §1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR §1.114. Applicant's submission filed on 17 August 2009 has been entered.

Response to Arguments

6. Applicant's arguments received on 17 August 2009 have been fully considered but they are not persuasive. Referring to the previous Office action, Examiner has cited relevant portions of the references as a means to illustrate the systems as taught by the prior art. As a means of providing further clarification as to what is taught by the references used in the first Office action, Examiner has expanded the teachings for comprehensibility while maintaining the same grounds of rejection of the claims, except as noted above in the section labeled "Status of Claims." This information is intended to assist in illuminating the teachings of the references while providing evidence that establishes further support for the rejections of the claims.

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7. Applicant has amended the independent claims in part by inserting the limitations of claim 3 into claims 1, 5, 8 and 12 which state “*wherein when a form to be circulated in the workflow reaches a first one of the multiple consecutive nodes to be processed by the at least one participant, said workflow server consolidates information necessary for the at least one participant's determination...*” and states in their remarks that “The Office admits Bandat does not teach or suggest ...” (see Applicant's Remarks, p.11) this limitation and argues that the secondary references of Deborin and Dewan “does not cure the deficiency.” (Remarks, p.11). Applicant argues that Deborin is distinguishable from the instant application because Deborin teaches the consolidation of tasks (performed by the same role) into a single activity while “Applicant's claimed invention consolidates information necessary for ... participant's determination” (Remarks, p.11) arguing that a ‘task’ is not equivalent with ‘information’. (Remarks, p.11).
8. Examiner respectfully disagrees with Applicant's interpretation of the distinctions and their claim that Deborin does not teach the consolidation of information. Indeed, the support cited in the previous Office action plainly states that “The BPM Server Repository is a content management solution that [] consolidates, and provides centralized storage of business process models, enterprise data and other corporate information.” (see Deborin [p.12] and also the Final Office action, p.7) which clearly indicates the consolidation of information (and knowledge) as Applicant argues in their Remarks, p.11. Moreover, Bandat [9,18] teaches the consolidation of data and in [9,55] the consolidation of data objects.
9. Regarding claims 1, 5, 6, 8, 12 and 13, Applicant has failed to rebut Examiner's **Official Notice** that it was old and well-known as well as common place in the computer networking arts at the time of the invention that client/server architectures involve information (consolidated or not) that is sent from a server to a client (and *vice versa*) which, in this case, is equivalent to an *operating computer terminal*. Examiner notes the following discussion of Official Notice taken from the MPEP:

To adequately traverse such a finding, an applicant must specifically point out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common

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knowledge or well-known in the art. See 37 CFR 1.111(b). See also *Chevenard*, 139 F.2d at 713, 60 USPQ at 241 (“[I]n the absence of any demand by appellant for the examiner to produce authority for his statement, we will not consider this contention.”). A general allegation that the claims define a patentable invention without any reference to the examiner’s assertion of official notice would be inadequate. If applicant adequately traverses the examiner’s assertion of official notice, the examiner must provide documentary evidence in the next Office action if the rejection is to be maintained. See 37 CFR 1.104(c)(2). See also *Zurko*, 258 F.3d at 1386, 59 USPQ2d at 1697 (“[T]he Board [or examiner] must point to some concrete evidence in the record in support of these findings” to satisfy the substantial evidence test). If the examiner is relying on personal knowledge to support the finding of what is known in the art, the examiner must provide an affidavit or declaration setting forth specific factual statements and explanation to support the finding. See 37 CFR 1.104(d)(2). If applicant does not traverse the examiner’s assertion of official notice or applicant’s traverse is not adequate, the examiner should clearly indicate in the next Office action that the common knowledge or well-known in the art statement is taken to be admitted prior art because applicant either failed to traverse the examiner’s assertion of official notice or that the traverse was inadequate. If the traverse was inadequate, the examiner should include an explanation as to why it was inadequate. (MPEP § 2144.03(C))

10. Applicant has not “specifically point[ed] out the supposed errors in the examiner’s action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art.” Applicant statements do not amount to a sufficient traversal because no such statements were given in Applicant’s Remarks. For these reasons, the aforementioned **Official Notice** is taken to be **admitted prior art**.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- Claim 8 recites the limitation “form generating means for generating a new form based on the access permission set by said access permission setting means and consolidating the work items means” where the phraseology is confusing and somewhat inconsistent. The claim

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earlier recites 'consolidating means for consolidating the work items' but not for 'consolidating the work items means' where the last term 'means' leads to confusion. For purposes of examination, Examiner interprets this as meaning '... consolidating the work items by said consolidating means.'

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 1–15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bandat, et al. (US 6816902 B1) in view of Deborin, *et al.*, (*Continuous Business Process Management with HOLOSOFX BPM Suite and IBM MQSeries Workflow*) and further in view of Dewan, et al., (*Workflow Redesign Through Consolidation...*).

Claims 1, 5, 8 and 12:

Although claims 1, 5, 8 and 12 are worded and/or structured slightly differently, they have the same scope and so are addressed together. Bandat discloses and/or describes the following limitations as shown.

A workflow system comprising (Bandat's invention is entitled: "Method and system for improving **workflow** performance in **workflow** application systems" where a "workflow application system" is a 'workflow system');

- *operating computer terminals executing a workflow* (See at least Bandat [0029]: "communication between the central server and client workstations..." is described. Workstations are equivalent to 'operating computer terminals'); *and*
- *a workflow server connected with said operating computer terminals through a network to manage the workflow, wherein said workflow server consolidates information necessary for*

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processing multiple consecutive nodes to be processed by at least one participant operating one of said operating computer terminals (Bandat [6,59] states “This implies that islands on one workstation can be executed consecutively by different user-names or user-roles, where one person may also act in different user roles.”, hence corresponds to *at least one participant operating one of said...terminals*. See at least Bandat [abstract]: “The invention identifies areas in a **workflow** graph that operate on one workstation--islands that can execute also remote from a central **workflow** server.” Emphasis added. See also Bandat [4,33]: “Islands are parts of the **workflow** which are best to be described with the help of a **workflow** graph. They are comprising connected sub-parts of a **workflow** graph according to the following rules: (34) An island is formed by an aggregation of activities associated with the same physical or logical location attributes.” (emphasis added). The term ‘islands’ thus corresponds to a set of activity nodes and ‘aggregation’ corresponds to the ‘consolidation’ of these activity nodes. This consolidation necessarily involves the information associated with the several activities and, *ipso facto*, must also be consolidated in order to consolidate (aggregate) activities. In addition, see at least Bandat [6,59]: “This implies that islands on one workstation can be executed consecutively by different user-names or user-roles, where one person may also act in different user roles.” Note that “one person” corresponds to a ‘participant’ in the instant claim. In Bandat [7,1]: “The island object contains the information which can optionally be downloaded to a physical workstation where the island can be executed.” It is plain from the context that the element that *sends* corresponds to a server that *sends the consolidated information* to the *operating computer terminals*. Bandat [4,46] states: “Only islands are executable for which one and only one end user or end user role has been assigned to the execution of all activities in the island.” (emphasis added) hence the aggregation into islands corresponds to the ‘consolidation’ of the instant claim.)

Bandat does not specifically teach the following limitations, but Deborin does as shown.

- *wherein when a form to be circulated in the workflow reaches a first one of the multiple consecutive nodes to be processed by the at least one participant, said workflow server consolidates information necessary for the at least one participant's determination, and wherein*

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said workflow server generates a new form based on the consolidated information sends the consolidated information to the operating computer terminal (see at least Deborin, *et al.* page 12: "The BPM Server Repository is a content management solution that [] consolidates, and provides centralized storage of business process models, enterprise data and other corporate information." The "BPM Server" corresponds to the *workflow server*. Deborin, *et al.* on page 110 further refers to the term 'participant': "A role is a participant that performs a task in an organization's process []." Deborin, *et al.* further teaches on page 248: "The following steps must be completed: Consolidate Tasks performed by the same role into a single activity." Emphasis added. Thus, the term *multiple nodes* in the claim is equivalent to several tasks being performed by a single participant; hence, Deborin, *et al.* teaches that information pertaining to multiple tasks is consolidated and performed by a single participant for his/her *determination*. Finally, in at least Deborin, *et al.* on page 19 the phrase "Data can be routed to different applications, based on data values and rules encoding the way the enterprise conducts its business. The applications may be on different systems, running on different computers and different operating systems" is equivalent to the phrase in the limitation *and sends the consolidated information [] to the operating terminal*. Also, Deborin [p.185] refers explicitly to a form "used as the output of this process" wherein the output is sent to the next node in the process. Examiner takes **as admitted prior art** that it is old and well-known as well as common place in the computer networking arts and present in the instant application that client/server architectures involve information (consolidated or not) that is sent from a server to a client (and *vice versa*) which, in this case, is equivalent to an *operating computer terminal*. Note however that Bandat [9,18] teaches the consolidation of data and in [9,55] the consolidation of data objects.)

- *consolidating means for consolidating the work items acquired by said means for acquiring to provide the at least one participant with consolidated information, wherein when the form to be circulated in the workflow reaches a first one of the multiple consecutive nodes to be processed by the at least one participant, said workflow server consolidates information necessary for the at least one participant's determination* (see the preceding paragraph.);

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- *means for storing a definition of nodes assigned to respective participants performing a workflow* (See at least Deborin page 17: “Business activities and data are depicted in Buildtime. The people that perform them and the local or client/server programs that support the people are also defined. [] All of this modeling information is then stored in the database of MQSeries Workflow Buildtime.” Emphasis added. Again, in the instant application “activities” is equivalent to nodes, “modeling information” corresponds to the *definition of nodes*, and “people that perform them” corresponds to *participants performing a workflow*.)
- *means for acquiring from said means for storing work items selectable for each node within the consolidation range determined by said means for determining a range of consolidation* (See at least Deborin page 18: “For every process instance, the server components of MQSeries Workflow navigate through the process and assign the work to the right person in the right sequence. [] Activities that need to be performed appear in worklists of the assigned users. When a staff member selects, for example, a program activity, the program attached to this activity is started with the necessary information. User worklists contain continuously updated overviews of pending activities.” The act of ‘updating’ corresponds to the *means for acquiring* since this involves communication between client and server. The *work items selectable for each node* corresponds to “user worklists”. Examiner further notes that Deborin generally describes the practice of a workflow server providing the *means for acquiring* information to be tasked to clients in a workflow system. See for example Deborin in at least page 17: “MQSeries Workflow is a client/server system and there are dedicated client and server components that are responsible for the different workflow management tasks.”);
- *access permission setting means for setting access permission to each field at each node within the consolidation range determined by said consolidation range determining means* (See Deborin on page 510);
- *form generating means for generating a new form based on the access permission set by said access permission setting means and consolidating the work items means* (Deborin [p.12] describes “individually defined user access levels” (emphasis added) and the BPM Server is an

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entity that 'consolidates' enterprise data and in Deborin [p.5] "Model the user interfaces: The business users and the IT development staff work together to create new application and management reporting interfaces and forms." (emphasis added) Also see Deborin page 353 which refers to system components that generate Java Server Pages which correspond to a *form* thus, the form generating means is based on access permission setting means and consolidating the work items means.); and

- *form sending means for sending the at least one participant the form generated by said form generating means* (See the rejection text in the previous limitation. Further, note that a 'server' sends information such as a *form*, but is equivalent to *providing*, i.e., *form sending means* and the *providing means* stated in claim 7 are equivalent).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bandat and Deborin because the efficiencies to be gained by consolidating information as taught by Bandat with the attendant flexibility as taught in Deborin further increases the efficiencies of consolidation with respect to 'people that perform business activities' (Deborin p.12). Moreover, the benefits of "consolidate[ing] tasks performed by the same role" (Deborin, p.248) further enhances the efficiency of process modeling and associated tasks (as shown in Deborin p.9) and that the technological arts existed at the time of the invention and the benefits of the resulting combination were predictable.

Neither Bandat nor Deborin specifically teach the following limitations, but Dewan does as shown.

- *means for determining a range of consolidating multiple consecutive nodes to be processed by one participant in the workflow* (See at least Dewan [abstract]: "...a new methodology that helps system designers determine the optimal set of tasks to be consolidated. [] Optimal design insights are obtained for both sequential and generic process structures." In Dewan, "new methodology" corresponds to the *means for* in the instant case and the term "sequential" corresponds to a set of *consecutive nodes*. See also Dewan page 289: "In a sequential process, every task is on the critical path..." Examiner notes that not every subset of *consecutive nodes* would be on a critical path (as in PERT/CPM formulations), but it would be obvious to those

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skilled in the art at the time of the invention utilize this same methodology to consolidate consecutive nodes that are not necessarily on a critical path in addition to those that are. As Dewan in at least page 289 further notes: "Most results obtained under sequential formulation are applicable to more generic cases..." (emphasis added) and therefore applicable to situations where consecutive nodes in a workflow graph are not on a critical path. Finally, the consolidations described in Dewan page 286 pertain to tasks performed by a single person (read *participant*): "When the processing task and the controlling task are combined, the same person becomes responsible for both tasks." Emphasis added.);

- *means for consolidating the work items acquired by said means for acquiring to provide the participant with consolidated information* (As shown above in the rejection of an earlier limitation of the instant claim, Dewan describes a methodology for consolidating work items and therefore corresponds to *means for consolidating the work items*).

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the teachings of Deborin and Dewan and utilize the methodology in Dewan as a means for determining nodes (tasks) for consolidation in conjunction with the workflow system using a client/server type architecture as described in Deborin because it can improve the efficiency of workflow management systems and that the technological capability existed at the time of the invention to combine these features and the benefits of the resulting combination were predictable.

Claim 6:

Bandat does not specifically teach the following limitations, but Deborin, in an analogous art does as shown.

- *the definition of nodes includes information relating to access permission to each field at each of the nodes* (See at least Deborin page 510 which discusses "authorization rights...you can define a category for these processes [and] who is authorized for a certain process category..." The text further describes how these rights are "represented by the Function object in BPM Workbench." Here, a "function object" corresponds to a *definition of nodes*); and

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- *said workflow server further comprises highest-level access permission acquiring means for acquiring from said storage means the highest level of access permission to each field within the consolidation range determined by said consolidation range determining means* (Deborin as shown in the rejection of the previous limitation describes the system elements that help manage authorization rights for a certain process category. This rights management component is part and parcel of the workflow management system described in Deborin that necessarily involves components that provide storage means and acquiring means. Thus, given a set of fields which are data entry elements, hence part of a process, the "Category in Buildtime" can allow the user of the system to "manage authorization rights for Runtime...").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bandat and Deborin because the efficiencies to be gained by consolidating information as taught by Bandat with the attendant flexibility as taught in Deborin further increases the efficiencies of consolidation with respect to 'people that perform business activities' (Deborin p.12). Moreover, the benefits of "consolidate[ing] tasks performed by the same role" (Deborin, p.248) further enhances the efficiency of process modeling and associated tasks (as shown in Deborin p.9) and that the technological arts existed at the time of the invention and the benefits of the resulting combination were predictable..

Claim 13:

Neither Bandat nor Deborin specifically teach the following limitations, but Dewan does as shown.

- *wherein when there are multiple work items that are selectable for a certain node, some routes in all the routes determined for respective work items, which are contained in one route, or common part of all the routes is determined in said consolidation range determining step as the consolidation range* (Dewan on page 3 describes the method of consolidating tasks and using task numbers to establish what amounts to a *consolidation range*: "Pair-wise consolidations can represent consolidation of more than two tasks. For example, consolidating tasks 6, 7 and 8 can be represented as consolidating tasks 6 and 7 and tasks 7 and 8.")

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Bandat and Deborin because the efficiencies to be gained by consolidating information as taught by Bandat with the attendant flexibility as taught in Deborin further increases the efficiencies of consolidation with respect to 'people that perform business activities' (Deborin p.12). Moreover, the benefits of "consolidate[ing] tasks performed by the same role" (Deborin, p.248) further enhances the efficiency of process modeling and associated tasks (as shown in Deborin p.9) and that the technological arts existed at the time of the invention and the benefits of the resulting combination were predictable.

Claims 3:

Bandat does not specifically teach the following limitations, but Deborin, in an analogous art does as shown.

- *The workflow system of Claim 1, wherein the operating computer terminal sends said workflow server results of work performed by the at least one participant based on the information sent from said workflow server.* For purposes of this examination, the Examiner interprets the phrase: *...sends said workflow server results...* to be read as '*sends to said workflow server results...*' As noted in claim 2 above, it is well-established in the computer networking arts and in the present disclosure that client/server architectures typically involve client transmissions of data to a server. Moreover, Deborin, *et al.* in at least page 25 describes this in the context of workflow management systems: "Workflow server performance and reliability [] requires the concentration of incoming workflow client messages into a bigger data stream prior to being directly sent to the workflow server." Emphasis added. Finally, Deborin, *et al.* on page 21 specifically refers to processed information sent from a client (read 'operating computer terminal') to a server: "Clients are responsible for executing the program activities that interact with users. Clients are also responsible for giving users access to the workflow management system, that is, access work items, access running processes, and monitor processes. The communication with servers is through MQSeries, using the client message layer of MQSeries Workflow.")

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Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the teachings of Bandat and Deborin, *et al.* because communication between clients and servers in workflow management systems pertaining to processed information provides the capability for greater control of information processes and can improve the efficiency of workflow management systems.

Claim 4:

Bandat does not specifically teach the following limitations, but Deborin, in an analogous art does as shown.

- *said workflow server performs individual processing on each of the multiple nodes based on the results of work performed by the participant and sent from the operating computer terminal to advance the workflow* (See at least Deborin page 22: "The server components coordinate and manage an MQSeries Workflow system and its clients." As noted above in claims 2 and 3, it is well-established in client/server architectures as in the disclosure of the instant application that communication and processing occur on both the client-side and server-side in such systems. Moreover, in Bandat the workflow server "Those parts, called "islands" can be interpreted or executed on the central **workflow** server..." As noted in the rejection of claim 1, 'islands' are formed "by an aggregation of activities associated with the same physical or logical location attributes." Emphasis added. Hence, the aggregation of activities corresponds to *multiple nodes* that are executed (processed) on a workflow server.)

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the teachings of Bandat and Deborin, *et al.* because it is basic in the networking arts for servers to process information sent from clients (operating computer terminals) and since clients process consolidated information corresponding to *multiple nodes*, it is all the more obvious that any workflow system would benefit from server-side processing of work performed on a client when that involves use of consolidated information.)

Claim 7:

Bandat does not specifically teach the following limitations, but Deborin, in an analogous art does as shown.

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- *said means for storing stores a layout definition of a form used for time of one participant's continuous activities* (Deborin page 353 describes “With this tool, you can create JSP layout skeleton files for use with the MQSeries Workflow Web Client []” wherein the “skeleton files” are stored in the “BPM Workbench” that is integrated with the BPM Server that constitute the MQSeries Workflow.); *and*
- *providing means provides the at least one participant with a form formatted based on the form layout definition acquired from said means for storing and a field access permission acquired from said highest-level access permission acquiring means* (As shown in the rejection of claims 5 and 6 above, and further by Deborin as shown, integral components in workflow management systems are servers which constitute the *providing means* in that they transmit information regarding form formatting and layout. Deborin page 353 states: “The tool enables you to create a JSP file for each program activity, including the putting and setting of fields corresponding to the data structure of each activity.”)

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to incorporate the teachings of Deborin into those of Bandat as it describes how form information is transmitted to clients and thus renders workflow management systems more useful in a corporate setting.

Claim 10:

Neither Bandat nor Deborin specifically teach the following limitations, but Dewan does as shown.

- *when there are multiple work items selectable for a certain node, if routes determined for respective work items have no inclusion relationship with one another, said consolidation range determining means determines common part of the routes as the consolidation range* (See the rejection of claim 9 above).

Claim 11:

Bandat does not specifically teach the following limitations, but Deborin does as shown.

- *said access permission setting means sets the highest level of access permission of the participant to each field defined on the form for each node as the access permission* (See Deborin page 21: “Clients are also responsible for giving users access to the workflow

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management system, that is, access work items, access running processes, and monitor processes.”) *upon consolidation.*)

Deborin does not specifically address the setting of access permissions *upon consolidation*; however, Dewan as shown describes the consolidation of tasks (nodes) as further noted in the rejection of claim 5 that describes the *consolidation means* and *consolidated information*. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the teachings of Deborin pertaining to access permission setting means in the workflow management system described therein with the teachings of Dewan and the notion of task consolidation. Such combination would thereby improve the workflow efficiency (consolidation) while at the same time maintaining an efficient and effective level of data access security (permission setting).

Claim 14:

Bandat does not specifically teach the following limitations, but Deborin, in an analogous art does as shown.

- *determining the highest level of access permission to each field within the consolidation range from the workflow definition stored in the storage device* (See the rejection of the limitation in claim 11 *A workflow engine...*); and
- *acquiring the layout definition of a form to be provided to the at least one participant from the workflow definition wherein a form as consolidation information is generated in said consolidation information providing step based on the access permission and the layout definition* (See the rejection of claim 7).

Neither Bandat nor Deborin specifically teach the following limitations, but Dewan does and describes the consolidation of tasks (nodes) as further noted in the rejection of claim 5 that describes the *consolidation means* and *consolidated information*. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the teachings of Deborin pertaining to access permission setting means in the Workflow Management System described therein with the teachings of Dewan and the notion of task consolidation. Such combination would thereby improve the workflow efficiency

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(consolidation) while at the same time maintaining an efficient and effective level of data access security (permission setting).

Claim 15:

Bandat does not specifically teach the following limitations, but Deborin does as shown.

- *receiving results of work performed by the at least one participant on the consolidated information; and storing in the storage device the participant's inputted field values and the at least one participant's selected work from the received results of work* (Deborin describes in detail many elements of workflow management systems and describes client/server architectures as they pertain to workflow management systems). Examiner further notes that such systems involve the steps of receiving and storing information as disclosed. Further, Deborin page 248 describes work where steps "Consolidate Tasks performed by the same role into a single activity" and thus addresses *work performed on the consolidated information*. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the teachings of Deborin with that of Dewan because incorporating the use and function of consolidated information in the client/server workflow management system described in Deborin would enhance the efficiency and functionality of workflow management systems.

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Conclusion

Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to **Mark A. Fleischer** whose telephone number is **571.270.3925**. The Examiner can normally be reached on Monday-Friday, 9:30am-5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **Bradley Bayat** whose telephone number is **571.272.6704** may be contacted.

The prior art made of record and not relied upon that is considered pertinent to applicant's disclosure are:

- Racca, et al. (US 7562339 B2) and pertains to business process development and execution.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair> <<http://pair-direct.uspto.gov>>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866.217.9197** (toll-free). Any response to this action should be mailed to:

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Alexandria, VA 22314.

Mark A. Fleischer
/Mark A Fleischer/
Examiner, Art Unit 3624 2 November 2009

/Scott L Jarrett/
Primary Examiner, Art Unit 3624